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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,949	11/19/2003	Patrik Grundstrom	P17514-US2	7278
27045	7590	04/01/2008		
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			EXAMINER LEE, Y YOUNG	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 04/01/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/716,949	Applicant(s) GRUNDSTROM ET AL.	
	Examiner Y. Lee	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-7,9-22,24-28,30-34 and 36-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9-22,24-28,30-34 and 36-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/28/08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 2, 5-7, 9-17, 19-22, 24-28, 30-34, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell et al (5,598,514) in view of Nishino et al (5,237,424).

Purcell et al, in Figures 1, 2, 5, 6, and 16-18, discloses a structure and method for a multi-standard video encoder/decoder that is substantially the same device and method for processing video data as specified in claims 1, 2, 5-7, 9-17, 19-22, 24-28, 30-34, and 36-38 of the present invention, the method comprising receiving a block of current video data in a first format 201, wherein the block of current video data in the first format is a portion of a current frame (e.g. intra-frame); encoding the block of current video data using data stored in a second format 204; storing new data in the second format 205; and storing the encoded video data 103, wherein the stored data contains image data from a previous frame (Fig. 17).

With respect to claims 2, 5-7, 9-17, 19-22, 24-28, 30-34, and 36-38, Purcell et al also discloses the stored data in the second format is a portion of a previously coded frame (e.g. inter-frame); the second format comprises reduced chrominance information 204 as compared to the first format; the first format and the second format comprises interleaved chrominance and luminance data (Fig. 6); each block of a video frame comprises a predefined grouping of pixels (Fig. 16); encoding the block of the current video frame comprises compressing the block of the current video frame (e.g. MPEG) by comparing the block of the current video frame to a corresponding block of another video frame; comparing the block of the current video frame to a corresponding block of another video frame is preceded by retrieving the corresponding block of the other video frame in the second format 204; transferring the new data in the second format to a memory location 103; and storing the new data for encoding of a corresponding block of a subsequent video frame (Fig. 18); storing the encoded video data in a third format in a buffer (e.g. DRAM); and transferring the buffered data to a memory location 103 on completion of encoding the block; transferring a portion of the block of video data from the buffer to the

memory 103 location if the buffer is full prior to encoding the entire block of video data; encoding the block of current video data 111 using the data stored in the second format is preceded by converting a block of a data in the first format to the second format 204; and the block of current video data comprises a micro-block line of video data (e.g. tiles of MB).

Although Purcell et al discloses the common MPEG format comprises chrominance and luminance data in an interleaved YCbCr 4:2:0 format (e.g. Background), it is noted Purcell et al differs from the present invention in that it fails to particularly disclose storing the data in such a format. Nishino et al however, in Figures 1-4, illustrates the concept of such well known shuffling technique in which the interleaved chrominance C and luminance Y data are stored in one continuous memory block MB.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Purcell et al and Nishino et al before him/her, to incorporate the well known data storage process as taught by Nishino et al in the memory device 205 of Purcell et al in order to efficiently process video data.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell et al in view of Nishino et al for the same reasons as set forth in Section 11 of the previous office action, dated 7/31/07.

Although Figure 1 of Purcell et al illustrates the process of transmitting encoded block of the current video frame over a communications link, it is noted both Purcell et al and Nishino et al differ from the present invention in that they fail to particularly disclose a wireless communications link as specified in claim 18. However, Examiner takes Official Notice that wireless communication is notoriously well known in the art. Therefore, one of ordinary skill in

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the art would have had no difficulty in recognizing that the communications device of Purcell et al can be flexibly and easily upgraded into a wireless device in order to efficiently transmit video data.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 2, 5-7, 9-22, 24-28, 30-34, and 36-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (571) 272-7334. The examiner can normally be reached on (571) 272-7334.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. Lee/

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Primary Examiner
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